# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

#### IN THE MATTER OF:

BASF Corporation 1609 Biddle Avenue Wyandotte, MI 48192

## **ATTENTION:**

Bryan Hughes EHS Manager bryan.hughes@basf.com

## Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring BASF Corporation ("BASF" or "you") to submit certain information about the facility at 1609 Biddle Avenue, Wyandotte, Michigan. Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us within 30 calendar days after you receive this request.

We are issuing this information request under Section 114(a) of the Clean Air Act ("the CAA"), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Enforcement and Compliance Assurance Division, Region 5.

BASF owns and operates an emission source at the Wyandotte, Michigan facility. We are requesting this information to determine whether your emission source is complying with the Renewable Operating Permits ("ROP") MI-ROP-M4777-2015a ("Plastics Plants Permit") and MI-ROP-B4359-2003b ("Chemical Plants Permit"), Permits-To-Install ("PTIs") 113-07B and 7-

21, and the Standards of Performance for Volatile Organic Liquid Storage Vessels, 40 C.F.R. Part 60 Subpart Kb ("NSPS Subpart Kb").

At this time, EPA Region 5 is not accepting any hard-copy document deliveries. If possible, we ask BASF to upload all required information to the secured web-link shared with you at the time you received this request. If you did not receive a web-link, or if you are having technical difficulties, you must contact Valeria Apolinario at apolinario.valeria@epa.gov or 312-886-6876 to make arrangements to submit your response.

BASF must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1519.

You may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice.

This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject BASF to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Valeria Apolinario at 312-886-6876.

Michael D. Harris Division Director Enforcement and Compliance Assurance Division

# Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

### **Instructions**

- 1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
- 2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
- 3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
- 4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
- 5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
- 6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

#### **Electronic Submissions**

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

- 1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
- 2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

- 3. Provide submission to the secure web-link provided by EPA.
- 4. Provide a table of contents of all electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. We recommend the use of electronic file folders organized by question number.
- 5. Please submit documents claimed as confidential business information (CBI) in separate file folders apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI.
- 6. Certify that the attached files have been scanned for viruses and indicate what program was used.

#### **Definitions**

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq* or NSPS Subpart Kb.

- 1. "FGPOLEMCON" shall refer to the Flexible Group in PTI 70-21 described as "Equipment in the conventional polyols manufacturing process controlled by a caustic scrubber (consisting of two caustic absorbers) and a thermal oxidizer in series. Equipment in the graft polyols manufacturing process are controlled by only the thermal oxidizer."
- 2. "Polyol RTO" shall refer to the Regenerative Thermal Oxidizer controlling for emissions from polyol production, identified as the thermal oxidizer for the flexible group "FGPOLEMCON" in PTI 70-21.
- 3. "Resin RTO" shall refer to the Regenerative Thermal Oxidizer controlling for emissions from resin production, identified under the flexible group "FG-RTO" in PTI 113-07B.
- 4. "caustic scrubber" shall refer to the caustic scrubber controlling for emissions from polyol production, identified as the caustic scrubber for the flexible group "FGPOLEMCON" in PTI 70-21.

# Appendix B

# Information You Are Required to Submit to EPA

BASF must submit the following information pursuant to Section 114(a) of the CAA,

## 42 U.S.C. § 7414(a):

- 1. Provide a copy of Permit-to-Install 113-07A.
- 2. Provide all ROP Semi-Annual Reports associated with the Chemical Plants Permit (MI-ROP-B4359-2003b) and Plastics Plants Permit (MI-ROP-M4777-2015a) for the reporting periods of January 1, 2018, through June 30, 2022.
- 3. Provide an explanation of how BASF ensures its carbon adsorbers for its Plastics Plants Permit FGELAREACTOR are installed, operated, and maintained in a satisfactory manner in accordance with the Plastics Plants Permit Section 2. FGELAREACTOR. IV. 1.
- 4. Provide the operating plans required by 40 CFR § 60.113b(c)(1) for the Resin and Polyol RTOs.
- 5. Provide the following information for the Resin RTO and Polyol RTO including but not limited to:
  - a. Manufacturer's specifications, including recommended operating and maintenance procedures; specifications must include a diagram of the entire unit:
  - b. Records of documents related to the calibration of the temperature monitoring devices; and
  - c. P&I and process flow diagrams indicating all emission units, with associated emission units ID, routed to the RTOs during operations.
- 6. Provide documentation of the regular RTO inspections that BASF conducts of the Resin and Polyol RTOs, including but not limited to:
  - a. The date of each inspection;
  - b. The operational condition of the RTO and if applicable, reasons for the failure or malfunction of different components of the RTO;
  - c. Documentation of any repairs or corrective actions needed to address the cause of the malfunction or failure; and
  - d. The date and time any repairs or corrective actions were conducted to address the cause of the malfunction or failure.

- 7. Provide a description of each event where process vents were diverted from the Resin RTO directly to atmosphere since January 2018, including but not limited to the following information:
  - a. The date of the event;
  - b. The duration of the event in minutes, including start and end time;
  - c. Approximate emissions of VOCs vented to the atmosphere during the bypass event, in pounds;
  - d. The emission units in operation associated with the emissions diverted from the RTO; and
  - e. If internal or third-party inspections or troubleshooting of the RTO were necessary, provide documentation of these actions and the corrective actions BASF pursued in response.
- 8. Provide a step-by-step explanation of how the emergency activation valve is activated in the Resin RTO. Also provide an explanation of the "limit switches" associated with the emergency valve, as mentioned in the first 2021 semi-annual ROP deviation report.
- 9. From January 1, 2018, to the date of this request, provide records of the date, duration, and description of all shutdowns of the Resin RTO, including
  - a. What was done prior to the shutdown to minimize emissions;
  - b. Estimated emissions, in pounds, released into the atmosphere due to the shutdown; and
  - c. an explanation of why the shutdown was initiated.
- 10. Provide the performance test report which resulted in the establishment of 1820 °F as the minimum daily average firebox temperature for the Polyol RTO, as stated in PTI 70-21.
- 11. Provide an explanation on how BASF ensures that a minimum residence time of 0.8 seconds is maintained through the Polyol RTO.
- 12. Provide the current parameter limits for the scrubber effluent pH and liquid flowrate of the caustic scrubber. State whether the limits are minimum or maximum limits and include the units of measurement in which BASF monitors and complies with these parameters.
- 13. Provide further information of how the current parameter limits for the scrubber effluent pH and liquid flowrate of the caustic scrubber were established, including but not limited to:
  - a. If the parameter limits were established from a performance test, engineering assessment, or manufacturer's recommendations;
  - b. The dates of the latest performance tests or engineering assessments, as applicable; and
  - c. The latest performance test report, engineering assessment, or the manufacturer's recommendations, as applicable.
- 14. Provide the following records from January 1, 2018, to the date of this request:

- a. 3-hour average temperature records for the Resin RTO; indicate if process emissions were vented to the Resin RTO during each time period;
- b. Each individual measure of the firebox temperature for the Polyol RTO; indicate if any equipment from the conventional or graft polyol process, referenced as EUPOLCONV and EUPOLGRAFT in PTI 70-21, had process emissions vented to the RTO when the temperature was recorded;
- c. The daily average value of the firebox temperature for the Polyol RTO; and
- d. The caustic scrubber effluent pH and liquid flowrate data, as recorded every 15 minutes.
- 15. Provide a list of each storage vessel, with its associated emission unit ID, that has a capacity greater than or equal to 75 cubic meters (m³) that is used to store volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984. Indicate for each storage vessel:
  - a. If its capacity is greater than or equal to 151 m<sup>3</sup> and stores a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa);
  - b. If its capacity is greater than or equal to 75 m³ but less than 151 m³ and stores a liquid with a maximum true vapor pressure less than 15.0 kPa;
  - c. If it stores a liquid with a maximum vapor pressure greater than or equal to 76.6 kPa;
  - d. If it is equipped with a fixed roof in combination with an internal floating roof;
  - e. If it is equipped with an external floating roof;
  - f. If it is equipped with a closed vent system and controlled by the Polyol RTO; and
  - g. If it is equipped with a closed vent system and controlled by the Resin RTO.
- 16. For each storage vessel where 15.f. or 15.g. of this request applies, state if any control devices are equipped to control for emissions of these units if the RTOs go offline.
- 17. State if the trial operation of the Phase II Vacuum Stripping System Upgrade has commenced. If so,
  - a. Provide the date of commencement of the upgrade
  - b. Provide the date of stack testing planned for the Polyol RTO to verify styrene and acrylonitrile emissions.